

Date: Monday, 20/04/2009 1:01:32 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BRACKET ASSEMBLY
Job Number : 47299	
Estimate Number : 11181	
P.O. Number :	Part Number : D32941
This Issue : 20/04/2009 S.O. No. :	Drawing Number : D3294 REV.C
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : C
Previous Run : 47101	Material :
Written By :	Due Date : 30/04/2009 Qty: 8 Um: Each
Checked & Approved By : <u>JUD 09.04.20</u>	
Comment : Est A 04.08.24 New issue KJ/JLM	
Est Rev:B Now On Waterjet 07-03-26 JLM	
Est Rev:C 08-07-16 Redesign part DD verified by:EC	
Est Rev:D 08-10-06 revB as per dwg DD verified by:EC	
Est Rev:E 09-04-08 redesign part (rev.c) DD verified by:EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M2024T3S080	2024-T3 .080 sheet
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Comment: Qty.: 1.8976 sf(s)/Unit Total : 15.1805 sf(s)
 Material: 2024-T3 (QQ-A-250/4) 0.080" thick
 (M2024T3S.080)
 Identify for D3294-1
 Batch: 110908 IB 9-4-28

⑧

2.0	WATER JET	FLOW WATER JET
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Comment: FLOW WATER JET
 1-Cut as per Dwg D3294-3F
 Dwg Rev: C IB 9-4-28
 Prog Rev: C
 *****grain direction on a 45 deg as per dwg*****
 2-Deburr if necessary IB 9-4-28

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

509/04/28 (+8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 1:01:32 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 47299

Part Number: D32941

Job Number:



Seq. #: Machine Or Operation: Description :

5.0 BRAKE NC NC BRAKE



Comment: NC BRAKE

1- deburr if necessary

2- Bend as per Dwg D3294
(Ensure angle is correct)

SD 09/04/30

8

6.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SD 09/04/30

7.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BL 09-04-30

8

8.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 09/05/01

8

9.0 D32945 Doubler



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Doubler

Batch: B47418

EP 09/05/04

10.0 MS20470AD45 Rivet, Universal Head



Comment: Qty.: 15.0000 Each(s)/Unit Total : 120.0000 Each(s)

Rivet, Universal Head

Batch: M109031

EP 09/05/04

11.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1- install D3294-5 doubler to D3294-3 bracket with rivets as per dwg D3294

EP 09/05/04

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 1:01:32 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 47299

Part Number: D32941

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 02/05/04 (X8)

13.0

POWDER COATING

POWDER COATING



m 109091



Comment: POWDER COATING

Powder Coat Black Sandtex (Ref: 4.3.5.7) as per QSI 005 4.3

(8)

START TIME:

10:10

OVEN TEMPERATURE:

320°

FINISH TIME:

10:40

Fd 09/05/05

14.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



HL



Comment: INSPECT CHEMICAL CONVERSION COAT

09-05-05

(X8)

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with Dart P/N using fine point permanent ink marker, then Stock

Location:

ST 212

SS 09/05/07 (X8)

16.0

QC21

FINAL INSPECTION/W/O RELEASE



09/05/07 (X8)

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-05-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 47299
Description: Bracket		Part Number: D3294-1
Inspection Dwg: D3294	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

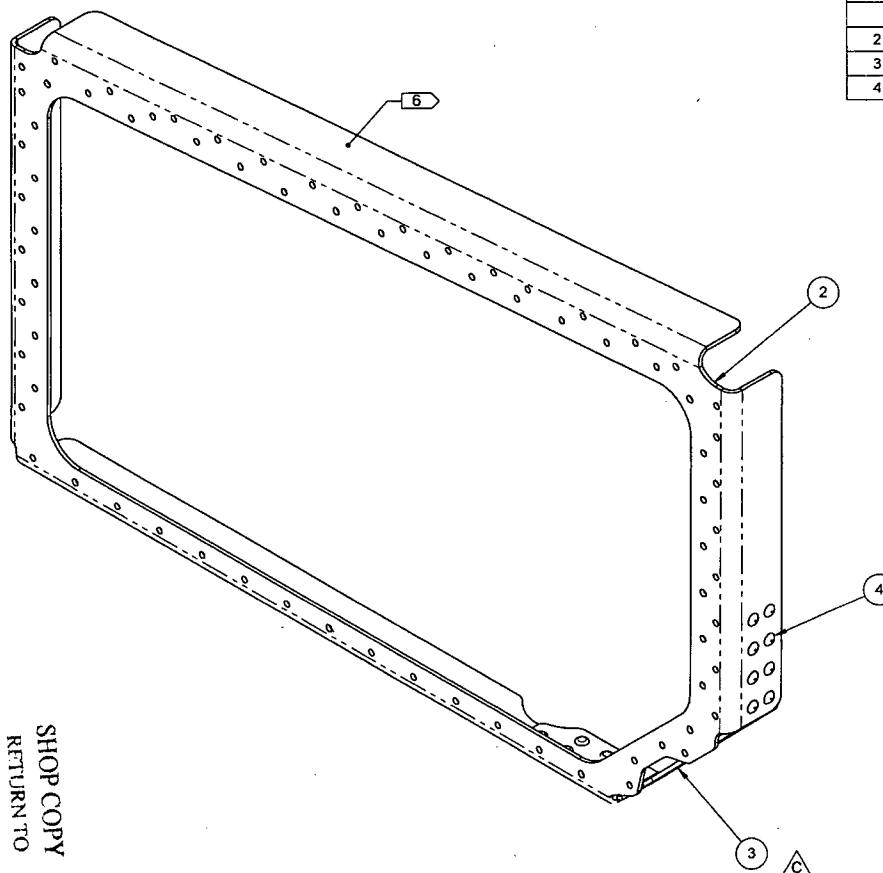
☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
20.02	+/-0.030	20.02	X			
1.785	+/-0.010	1.791	X			
R0.38	+/-0.030	.38	X			
R0.25	+/-0.030	.25	X			
12.98	+/-0.030	12.98	X			
2.072	+/-0.010	2.080	X			
Ø0.128	+0.005/-0.001	.130	X			
Ø0.141	+0.005/-0.001	.143	X			
0.080	+/-0.010	.078	X			
Grain Direction	N/A	45°	X			

Measured by: RB	Audited by: S	Prototype Approval:	N/A
Date: 9-4-08	Date: 09/04/08	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.08.24	New Issue	KJ/JLM	
B	06.03.09	Dimension 12.97 was 13.03	KJ/JLM	
C	08.11.27	Dimensions updated per Dwg Rev B	KJ/EC	

ITEM NO.	QTY. -1	PART NUMBER	DESCRIPTION
1	X	D3294-1	BRACKET ASSEMBLY
2	1	D3294-3	BRACKET
3	1	D3294-5	DOUBLER
4	15	MS20470AD4-5	RIVET



D3294-1 BRACKET ASSEMBLY

RELEASED
09/03/24

C	REMOVE FLANGE PREVIOUSLY ADDED. ADD -5 DOUBLER ZN A4-1, SHEET 5+6.	HS	09.03.24
B	CHANGE FLANGE FROM OUTSIDE TO INSIDE, ZN B4-1, C3-2. CHANGE GRAIN DIRECTION, ZN C4-2	HS	08.09.22
A	NEW ISSUE	CP	04.06.28
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.03.24		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

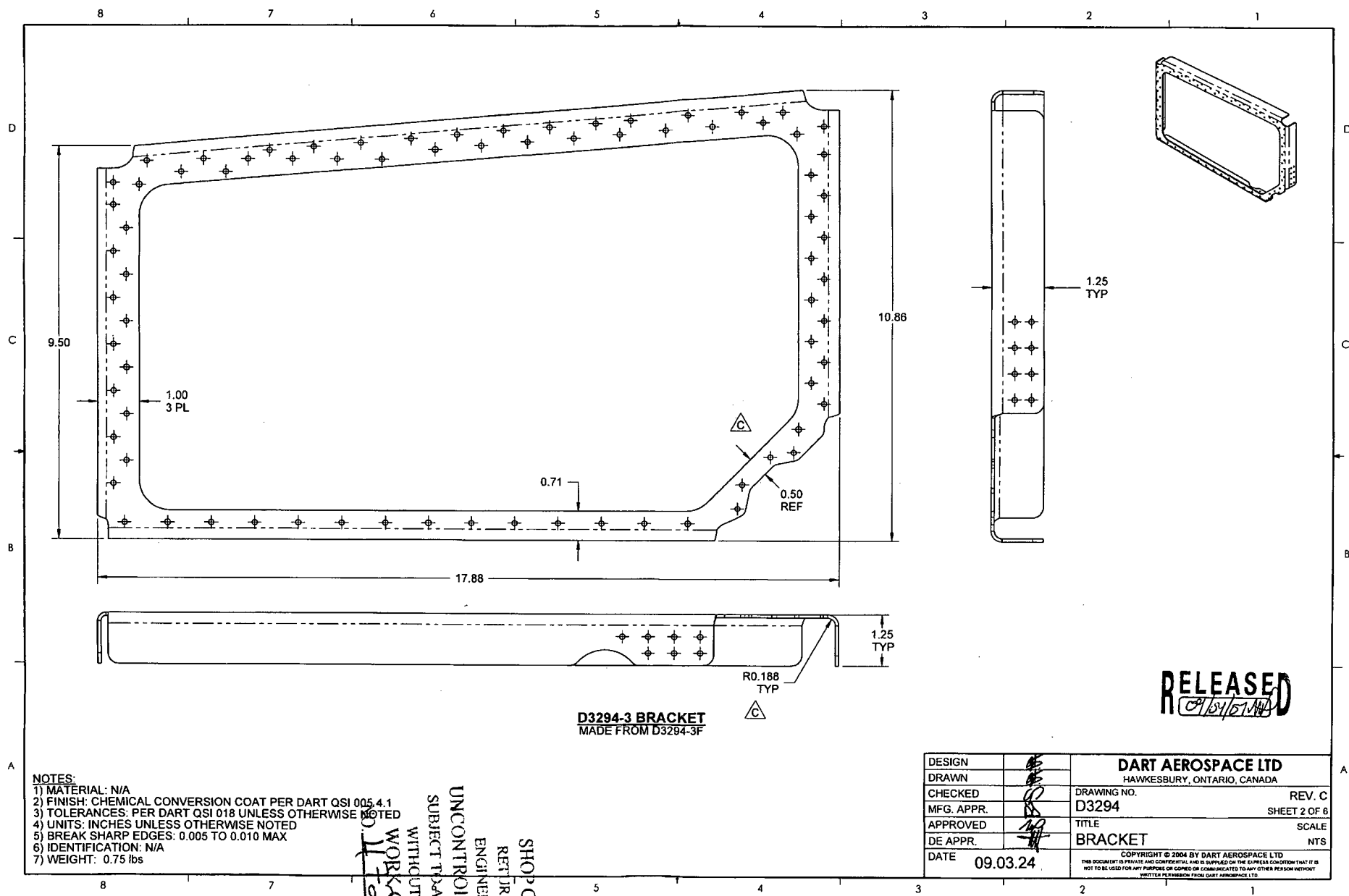
DRAWING NO. **D3294** REV. C
SHEET 1 OF 6

TITLE **BRACKET** SCALE NTS

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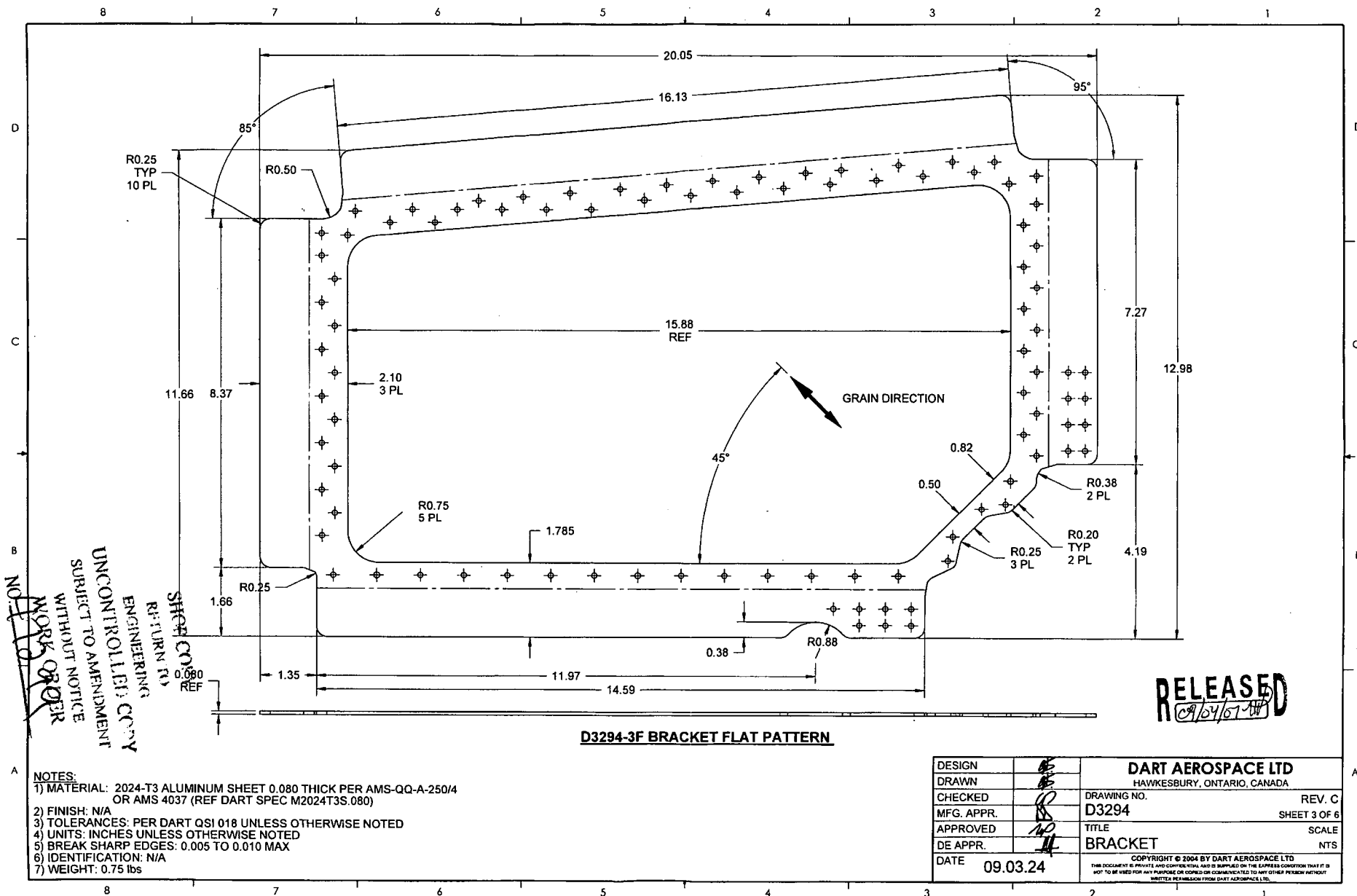
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- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT "BLACK" (4.3.5.7) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3294-1 AND B/N" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.83 lbs



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MFG. APPR.		D3294	SHEET 2 OF 6
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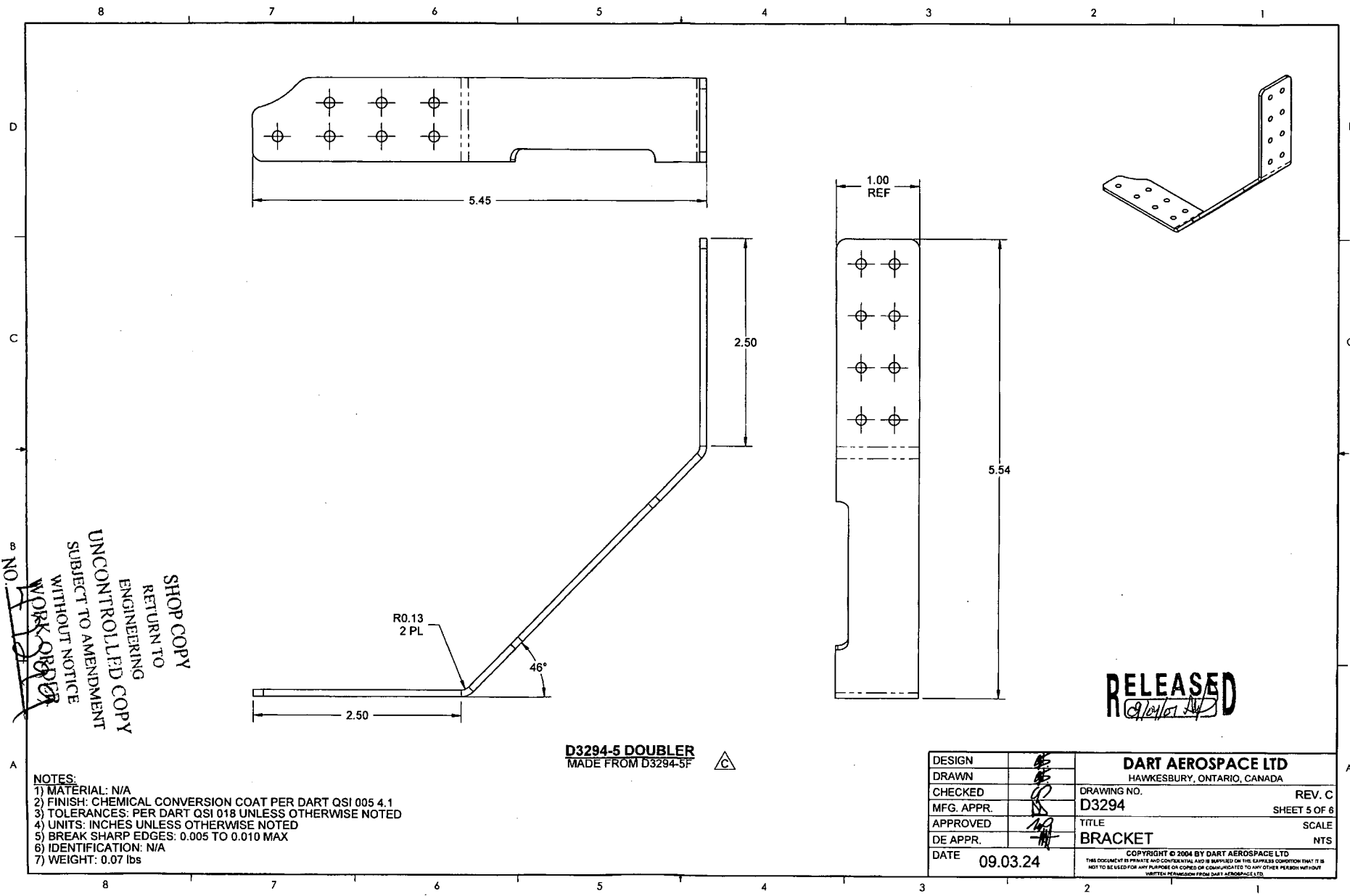


D3294-3F BRACKET FLAT PATTERN

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.080 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.080)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.75 lbs

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
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MFG. APPR.				SHEET 3 OF 6
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- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.07 lbs

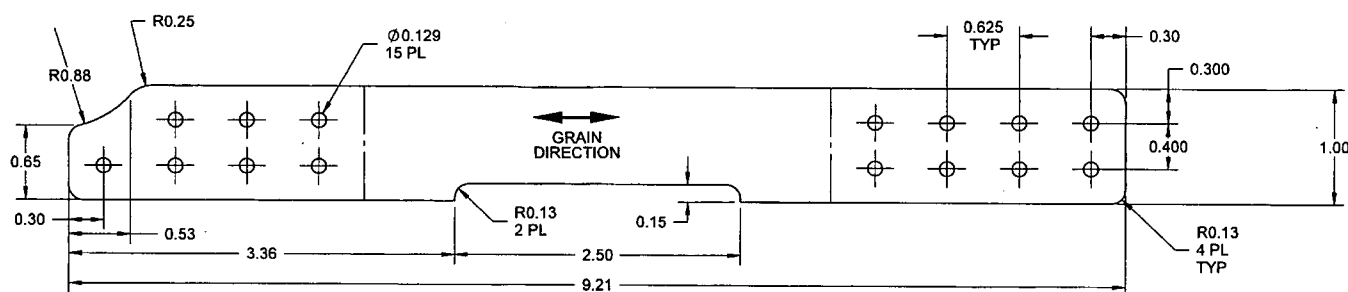
8 7 6 5 4 3 2 1

D

C

B

A



0.080
REF

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WITHOUT NOTICE
WORK ORDER
NO. 17200

D3294-5F DOUBLER FLAT PATTERN

RELEASED
9/04/07

- NOTES:**
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.080 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.080)
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.07 lbs

DESIGN		DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3294	SHEET 6 OF 6
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8 7 6 5 4 3 2 1